

Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton Division Director

## State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

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April 17, 2002

TO:

Internal File

FROM:

Priscilla W. Burton, Sr. Reclamation Specialist/Soils

Susan M. White, Sr. Reclamation Specialist/Biology James D. Smith, Sr. Reclamation Specialist/Hydrology

RE:

Conference Call, Energy West Mining, Inc., Des Bee Dove Mine, C/015/017-01A

Date: April 16, 2002

Division Attendees:

Pamela Grubaugh-Littig, Susan White, James Smith, and Priscilla Burton

Energy West Mining Attendees:

Chuck Semborski and Dennis Oakley

## Topics discussed:

- 1. Slopes steeper than 2:1 should be constructed of rock fill. (See R645-301-500, Appendix C).
  - Energy West indicated that all fill slopes are no steeper than 2:1 as measured by Neilson Construction. Cut slopes may be steeper than 2:1).
- 2. Application of 75-lbs/acre phosphorus. (Section 340, page 4).
  - They forgot and will apply and incorporate from Drainage #2 on.
  - Phosphorus will be hand broadcast before gouging and worked into the soil with gouging.
- 3. Loosening soil surface and roughening, not compacting soil surface.
  - This issue was not resolved.
  - The Division was concerned about the compaction of the surface soils between pocks. (Recent photographs illustrate the compaction through a shiny appearance left by the trackhoe at the back of the pocks on the slope adjacent to drainage #2).

## CONFERENCE CALL

- The Division re-iterated the importance of having the surface 1 to 3 feet loose for root penetration.
- Energy West is worried about slope stability and potential saturation from too many and too deep pocks, i.e. 3 feet.
- The Division does not think that surface roughness will lead to slope instability, because the slippage plane is within the fill and maintaining a compacted core will avoid failure.
- The Division encouraged a random arrangement of pocks (not all in rows and columns on the slope).
- 4. Rip rap gradation. (R645-301-700, page 21 and Appendix A).
  - Energy West indicated that Drainage #2 is on bedrock and does not need riprap, although the sides are being armored.
  - The Division stated that if riprap is used, it should be well graded even if not required in the plan, as this is the best management practice.
  - $D_{50}$  for drainage #3 is 4.5 feet. A discussion of the meaning of  $D_{50}$  ensued.  $D_{50}$  for the Deseret pad is 6.5 feet.
- 5. Pool in Drainage #2 and saturated slope.
  - This was mentioned but not discussed beyond what was said in #4 above.